PROGRESS

OF

MEDICAL SCIENCE.

THERAPEUTICS.

UNDER THE CHARGE OF

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Local Action of Helleborine.

MM. Vittovio and Elvidio used aqueous solutions of helleborine and instilled them under the eyelids in contact with the cornea. They thus obtained anæsthesia of this membrane which lasted longer than the anæsthesia produced by cocaine.

They maintain that at the same time the mobility of the eyelid was preserved, that the pupil did not dilate, and that the intraocular tension was not modified.

Used in subcutaneous injections helleborine caused local anæsthesia, and simultaneously produced cardiac disturbances. From these facts we may conclude that helleborine is a local anæsthetic which should, however, be used with great discretion.—*Gazette Hebdomadaire*, September 21, 1888.

[It should not be forgotten that helleborine has a very powerful action on the heart, and that the dose is only a small fraction of a grain.—Ed.]

Treatment of Recent Pleuritic Effusion by the Administration of Saline Cathartics.

The utility of saline cathartics in removing dropsical fluids, as demonstrated by Dr. Matthew Hay, may also be made serviceable to assist in removing pleuritic fluid in certain cases and obviate the necessity of operative interference.

Two cases under the care of P. Blakie Smith (*British Medical Journal*, October 13, 1888) were successfully treated by two drachms of magnesium sulphate dissolved in as small a quantity of hot water as possible, given twice a day. The patients were directed to abstain from fluids. After eleven days the signs of effusion in the left side, dulness up to the second rib and cardiac pulsations to the right of the sternum, had all disappeared.

Another case was treated with half an ounce of magnesium sulphate twice a day, with as little liquid in the diet as possible.

Patients with poor physique are, of course, ill-suited to this vigorous treatment, nor should the prompt use of the trocar be neglected where dyspnœa exists.

ACONITE IN ACUTE DYSENTERY.

DR. BEATSON recommends tincture of aconite in this disease; it should be administered in doses of one minim half hourly for eight to ten hours, and then one minim hourly. The frequency of the stools and pain and fever are said to be diminished by this treatment.—*Indian Medical Gazette*, March, 1888.

AMMONIUM SALTS AND CAMPHOR AS STIMULANTS.

According to the experiments of PROFESSOR BINZ, chloride of ammonium is a stimulant to the nervous system, the respiration and blood pressure are both increased in a few minutes by one-fifth to a quarter.

Camphor is also a good stimulant to the respiration when its failure is threatened, as in opium poisoning.—*Deutsche medicinische Wochenschrift*, November 8, 1888.

BORIC ACID SOLUTION IN OTITIS MEDIA SUPPURATIVA.

In the ordinary cases of chronic suppurative otitis media, DR. THEOBALD, of Baltimore, recommends the use of boric acid in powder, applying it by means of insufflation; but in acute cases, in which the destruction of the drum-head was not extensive, he preferred to use a saturated solution of boric acid.

The advantages of the solution are that the healing of the perforation in the drum-head was more certain to be brought about when it was used than when the powder was employed, since the latter, by too suddenly drying the ear, and also, by its mechanical action, frequently prevented the restoration of the drum-head. In acute cases it was found to be safer, since it could not obstruct the free escape of discharge from the middle ear, as the powder sometimes did, and it could be applied by unskilled hands more effectually than the powder.

The strength of the solution which he commonly employed was fifteen grains to the ounce. If the discharge was profuse, the ear was syringed with this three times a day, and less frequently as the otorrhœa declined.

DR. GRUENING has reported three cases of suppurative inflammation of the middle ear in which a fatal result was attributed to the introduction, by insufflation or by packing, of boric acid powder into the auditory canal.—*New York Medical Journal*, October 6, 1888.

GLUTEN BREAD.

DR. WOLTERING, writing in the *Allgemeine medicinische Centralb. Zeitung*, strongly recommends the more extended use of gluten as an article of diet, both on account of its extremely nutritive qualities and of its very low price. He shows by means of tables of analyses that pure gluten bread is some three times as nourishing as meat, and that bread made with the addition of forty per cent. of pure gluten contains more albumen than hare or chicken of the best quality.—*Lancet*, September 22, 1888.

Medicines for Nursing Mothers.

Professor Fehling has made a useful series of experiments to determine the drugs that may be safely given to nursing mothers. Among the drugs tested were:

Salicylate of sodium, which was found dangerous to the infant when given to the nurse in doses of forty-five grains daily.

Iodide of potassium may be safely given in doses of three grains daily.

Iodoform is gotten into the system of the child more easily through the nurse than by giving it directly to the child. Even when the wounds of the mother were dressed with iodoform the drug (iodine?) was observed in the urine of the child.

An important statement, if true, is that mercurial salts given to the mother do not affect the infant at all, or at least very slightly. Experiments with opium and morphine convinced Professor Fehling that twenty-five drops of tinct. opii (German Pharmacopœia) and grain one-tenth to three-tenths of morphine could be safely given to the mother.

Chloral could be given in doses of twenty-three to forty-five grains. Atropine very easily affects the child, even in small doses.

With regard to the general diet of the mother, Dr. Fehling thinks that the practitioner should correct the popular notion of prohibiting certain foods, such as salads or acids. He conducted his experiments with citric acid, mineral acids, and vinegar; no proof of the transmission to the child could be shown, and no disturbance in the general condition of the child was observed. The mother's milk remained alkaline during all the experiments.—*Medical Record*, July 28, 1888.

Lipanin.

This substitute for cod-liver oil is made from the finest olive oil after the directions of v. Mering. It is said to be readily taken and well absorbed. Patients treated with it do not suffer from any digestive disturbance, and their condition is improved.—*Centralblatt für den medicinischen Wissenschaften*, October 20, 1888.

Paraldehyde in Obstinate Vomiting.

Dr. La Moure has found small doses of paraldehyde successful in relieving obstinate vomiting from ovarian irritability, with sympathetic stomach disorder, and in the distressing nausea of migraine, with the most gratifying results.

The formula employed is as follows:

℞.—Paraldehyde . . . . ♏xl.
Elixir simpl. . . . . ℥j.—M.
S.—One teaspoonful in a little water, repeated in half an hour if required.

This small dose is not hypnotic in its effect. But few doses are usually required. The only objection to its use is its disagreeable odor.—*Albany Medical Journal*, June, 1888.

ANILINE IN PHTHISIS.

BERLATERS reports eight cases of tuberculosis treated with aniline. Four were in the early stage; three were in the beginning of the last stage of the disease and one was so far advanced that his death was expected within a few weeks. All of them, after using the aniline, were improved or cured: the fever disappeared completely; the appetite was better; the weight increased; the physical signs improved, and the bacilli in the sputa were less numerous.

The aniline was administered in doses up to twelve drops, with a few drops of alcohol and by inhalations of twenty-five to thirty drops each. Some of the patients were given, in the aggregate, two and one-half ounces of aniline.

It is advisable to interrupt the administration of this remedy from time to time for some days, especially if the patients complain of lassitude and weakness in the legs.

Sometimes a greenish-yellow color of the skin was observed, which disappeared after the aniline was withheld for a few days.—*Centralblatt für klinische Medicin*, September 8, 1888.

HYDROFLUORIC ACID IN PHTHISIS.

In a Hungarian medical journal, DR. GAGER has published an account of seventeen cases of phthisis in which he employed the hydrofluoric acid treatment. From the results obtained he is led to think that this treatment is, in some cases, capable of exerting a really beneficial influence. As an inhalation-chamber he made use of a compartment of a wooden hut, which was well boarded and had a well-fitting window-sash and door; its capacity was about 250 cubic feet.

In this the patients, one, two, or three at a time were seated, their clothes being protected from the injurious effects of the acid by sheets. The gas was manufactured in an adjoining compartment and conveyed to the ceiling of the inhalation-chamber by a leaden pipe. For the details of the preparation of the gas, the reader is referred to the *Lancet* of September 22, 1888.

As a rule, the patients were ordered one sitting of an hour's duration daily; occasionally two sittings were given.

In order to ventilate the apartment it was always necessary to open the door and window from three to eight times during the hour.

All of the patients on whom this treatment was tried presented tubercle bacilli in their sputum; the author's investigation was specially directed toward the "anti-bacillary" property of the hydrofluoric acid.

All renal cases were excluded. All the patients complained, during the first three sittings, of smarting and itching in the nose, of smarting in the eyes and often of sneezing, which lasted for days. Some patients had increased cough and even streaks of blood in their sputum; the inhalations having, indeed, to be stopped for some days on that account. Thirteen of the seventeen patients found their appetite increased after the inhalations.

In one case there was a slight epistaxis.

In five cases the bacilli disappeared from the sputum, a marked improvement in the symptoms being also noted.

In seven cases there was a distinct improvement of the physical signs. The body weight increased in twelve patients, but the amount of increase appeared to bear but little relation to the improvement of the general condition—*e. g*, in one case in which the bacilli disappeared and in which the physical signs improved there was no increase in the weight at all, and in another there was no improvement, though the weight increased nearly four pounds.

Three of the patients had pyrexia; of these, one lost it entirely, together with all the bacilli and expectoration; in the second case the fever decreased, but in the third it continued as high as ever. One of the patients suffered from night-sweats; these entirely disappeared.

In seven cases the vital capacity increased to the extent of from three to twenty cubic ounces. In two cases somewhat severe irritation of the laryngeal mucous membrane was set up, thus showing that this kind of treatment is contraindicated in cases of laryngeal phthisis—at all events, only an exceedingly small quantity of the gas has to be given. In five cases, including one, in which laryngeal complications existed, no improvement could be noticed; one very advanced case died. No evil consequences presented themselves in any of the cases.—*Lancet*, September 22, 1888.

MEDICINE.

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DIPHTHERIA.

HOYER (*Memorabilien*, 1888, 129) defines his views on the nature of diphtheria and describes his method of treating it. Considering it to be a disease produced by a microörganism invading a tonsil whose epithelium is lost, he devotes his attention to the prevention of this invasion, or to the destruction of the bacteria which have already attacked the tonsil. For this purpose he paints the tonsils with a solution of thirty parts of gallic acid, sixty parts of distilled water, and ten parts of glycerine. A brush of fine bristles is employed and considerable pressure exercised against the diphtheritic membrane. He carries out this procedure three times in succession, repeats it every six or eight hours, and continues the treatment until the diphtheritic membrane has disappeared. He prescribes also a gargle of one part of chlo-